DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/Ala Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-010058 Address: 333 Burma Road **Date Inspected:** 01-Nov-2009

City: Oakland, CA 94607

OSM Arrival Time: 1900 **Project Name:** SAS Superstructure **OSM Departure Time:** 700 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: See below **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** Tower and OBG Components

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance Inspector George Goulet was present during the times noted above for observations relative to the work being performed.

OBG Trial Assembly Area

This QA Inspector, George Goulet, randomly observed the following in response to Bolting Inspection Notification Sheet No. 000184:

Segment 5BE, panel points 33~33.5, north (crossbeam side), SP+SP connection plates

ZPMC workers performed final bolt tightening verification at the direction of ZPMC QC Inspector Hu Mei Gang (QCB) using ZPMC calibrated wrench #XO2-625. No less than 10% of the ASTM A325 bolt sets at each connection were torque tested, with a minimum of one bolt set tested at each connection. QCB provided this QA Inspector, George Goulet, with the following information regarding the bolt sets installed at this location. This QA Inspector, George Goulet, observed ZPMC's Bolt Test Log for SFOBB (RoCap list), listing the RoCap Set numbers, bolt set size, and the N.M test result for torque tightening purposes. The information presented by QCB and listed below appeared to this QA Inspector, George Goulet, to match the RoCap list.

RC Set No. DHGM220016 - M22-2.5x65 - test result 495N.M

The torque of the above noted bolt sets was verified by torque testing with a calibrated wrench with the wrench setting displayed as 495N.M. Based on the information above this QA Inspector, George Goulet, concurred with QCB for the issuance of green tag numbers.

WELDING INSPECTION REPORT

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Bay 10

This QA Inspector randomly observed the following work in progress in Bay 10:

SMAW welding of weld joint SSTL4-1C/L-72 located inside PCMK south tower, lift 4, stiffener connection plate to 119M double diaphragm web. Welder was identified as 040581. ZPMC QC was identified as CWI Wan Wen Zhong (QC1). The welding variables recorded by QC1 appeared to comply with WPS-B-T-3312-TC-P4.

FCAW welding of weld joint SSTL4-1B/L-5A located inside PCMK south tower, lift 4, skin B to skin C at the bottom 530mm of lift 4. Welder was identified as 052075. ZPMC QC was identified as CWI Li Ming (QC2). The welding variables recorded by QC2 appeared to comply with WPS-B-T-2231-C-U2-F.

FCAW welding of weld joint NSTL4-3B/L-3B located inside PCMK north tower, lift 4, skin A to skin E between 135M and 139M double diaphragms. Welder was identified as 040343. ZPMC QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC Jiang Xiao Bo, who was not a CWI. The welding variables recorded by QC1's assistant appeared to comply with WPS-B-T-2232-TC-U4b-1.

FCAW welding of weld joints NSTL4-3C/L-47,53 located inside PCMK north tower, lift 4, skin A to 119M double diaphragm web. Welder was identified as 057244. ZPMC QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC Jiang Xiao Bo, who was not a CWI. The welding variables recorded by QC1's assistant appeared to comply with WPS-B-T-4132.

FCAW welding of weld joints NSD1-A803A/B-13, 11 located on PCMK north tower, lift 1, skirt beam to plate. Welders were identified respectively as 053116, 054069. ZPMC QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC Li Peng Fei, who was not a CWI. The welding variables recorded by QC1's assistant appeared to comply with WPS-B-T-2132.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

As noted above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Serge Sinevod, 134-8257-0045, who represents the Office of Structural Materials for your project.

Inspected By:	Goulet,George	Quality Assurance Inspector
Reviewed By:	Dawson,Paul	QA Reviewer